Application No.: 09/623,533 2 Docket No.: 500862001520

Resp. to OA of 12/15/04

### IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Claim 1 (currently amended): An isolated, modified anti-viral peptide consisting of: a peptide that has been modified to contain a succinimidyl or maleimide containing group which is reactive with amino groups, hydroxyl groups, or thiol groups on blood components to form stable covalent bonds, said peptide consisting of an amino acid sequence selected from the group consisting of SEQ ID NO: 1, SEQ ID NO: 3, SEQ ID NO: 4, SEQ ID NO: 5, SEQ ID NO: 117, SEQ ID NO: 118, SEQ ID NO: 119, SEQ ID NO: 534, SEQ ID NO: 535, SEQ ID NO: 536, SEQ ID NO: 537, SEQ ID NO: 538, SEQ ID NO: 539, SEQ ID NO: 540, and SEQ ID NO: 541, said sequence exhibiting an anti-viral activity against human immunodeficiency virus (HIV) wherein said isolated peptide is covalently bonded to a blood component.

### Claim 2 (canceled).

Claim 3 (currently amended): The <u>isolated</u>, modified peptide of claim 1 wherein said succinimidyl or maleimide containing group is a maleimide containing group which is reactive with a thiol group on a blood protein.

Claim 4 (currently amended): The <u>isolated</u>, modified peptide of claim 1 wherein said peptide is DP 178, the amino acid sequence of which is SEQ ID NO:1.

### Claim 5 (canceled).

Claim 6 (currently amended): The <u>isolated</u>, modified peptide of claim 1 wherein said peptide has an amino acid sequence selected from the group consisting of SEQ ID NO: 3, SEQ ID NO: 4, SEQ ID NO: 5, SEQ ID NO: 117, SEQ ID NO: 118, SEQ ID NO: 119, SEQ ID NO: 534, SEQ ID

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NO: 535, SEQ ID NO: 536, SEQ ID NO: 537, SEQ ID NO: 538, SEQ ID NO: 539, SEQ ID NO: 540, and SEQ ID NO: 541.

# Claims 7-18 (canceled).

Claim 19 (currently amended): A composition for use in the prevention and/or treatment of acquired immune deficiency syndrome (AIDS) comprising, in a physiologically acceptable medium, a modified peptide consisting of a peptide that has been modified to contain a succinimidyl or maleimide containing group which is reactive with amino groups, hydroxyl groups, or thiol groups on blood components to form stable covalent bonds, said peptide consisting of an amino acid sequence selected from the group consisting of SEQ ID NO: 1, SEQ ID NO: 3, SEQ ID NO: 4, SEQ ID NO: 5, SEQ ID NO: 117, SEQ ID NO: 118, SEQ ID NO: 119, SEQ ID NO: 534, SEQ ID NO: 535, SEQ ID NO: 536, SEQ ID NO: 537, SEQ ID NO: 538, SEQ ID NO: 539, SEQ ID NO: 540, and SEQ ID NO: 541, said sequence exhibiting an anti-viral activity against human immunodeficiency virus (HIV) wherein said peptide is covalently bonded to a blood component.

Claim 20 (previously presented): The composition of claim 19 wherein said succinimidyl or maleimide containing group is a maleimide containing group which is reactive with a thiol group on a blood protein.

Claim 21 (previously presented): The composition of claim 20 wherein said peptide is DP 178, the amino acid sequence of which is SEQ ID NO:1.

Claims 22-30 (canceled).

Claim 31 (previously presented): The composition of claim 19 wherein said peptide has an amino acid sequence selected from the group consisting of SEQ ID NO: 3, SEQ ID NO: 4, SEQ ID NO: 5, SEQ ID NO: 117, SEQ ID NO: 118, SEQ ID NO: 119, SEQ ID NO: 534, SEQ ID NO: 535, SEQ ID NO: 536, SEQ ID NO: 537, SEQ ID NO: 538, SEQ ID NO: 539, SEQ ID NO: 540, and SEQ ID NO: 541.

## Claims 32-35 (canceled)

Claim 36 (previously presented): A composition comprising the modified anti-viral peptide of claim 1 in a physiologically acceptable medium.

Claim 37 (previously presented): The composition of claim 36 wherein said succinimidyl or maleimide containing group is a maleimide containing group which is reactive with a thiol group on a blood protein.

Claim 38 (previously presented): The composition of claim 36 wherein said modified anti-viral peptide has the amino acid sequence of SEQ ID NO:1.

Claim 39 (previously presented): The composition of claim 36 wherein said modified anti-viral peptide has an amino acid sequence selected from the group consisting of SEQ ID NO: 3, SEQ ID NO: 4, SEQ ID NO: 5, SEQ ID NO: 117, SEQ ID NO: 118, SEQ ID NO: 119, SEQ ID NO: 534, SEQ ID NO: 535, SEQ ID NO: 536, SEQ ID NO: 537, SEQ ID NO: 538, SEQ ID NO: 539, SEQ ID NO: 540, and SEQ ID NO: 541.

### Claims 40-51 (Canceled).

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Claim 52 (currently amended):

The modified anti-viral peptide of claim 1 wherein said

peptide hashaving the formula:

((SEQ ID NO:1)-Lys-( $\epsilon$ -MPA)).

Claim 53 (currently amended):

The composition of claim 19 comprising wherein the

modifiedsaid peptide has the formula:

$$\mathsf{NH_2}\text{-}\mathsf{YTSLIHSLIEESQNQQEKNEQELLELDKWASLWNWF-N}_\mathsf{H} \overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}}{\overset{\mathsf{NH_2}}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}}{\overset{\mathsf{NH_2}}{\overset{\mathsf{NH_2}}}{\overset{\mathsf{NH_2}}}{\overset{\mathsf{NH_2}}}{\overset{\mathsf{NH_2}}}{\overset{\mathsf{NH_2}}}{\overset{\mathsf{NH_2}}}{\overset{\mathsf{NH_2}}}{\overset{\mathsf{NH_2}}}{\overset{\mathsf{NH_2}}}{\overset{\mathsf{NH_2}}}{\overset{\mathsf{NH_2}}}{\overset{\mathsf{NH_2}}}{\overset{\mathsf{NH_2}}}{\overset{\mathsf{NH_2}}}{\overset{\mathsf{NH_2}}}{\overset{\mathsf{NH_2}}}{\overset{\mathsf{NH_2}}}{\overset{\mathsf{NH_2}}}{\overset{\mathsf{NH_2}}}{\overset{\mathsf{NH_2}}}{\overset{\mathsf{NH_2}}}{\overset{\mathsf{NH_2}}}{\overset{\mathsf{NH_2}}}{\overset{\mathsf{NH_2}}}{\overset{\mathsf{NH_2}}}{\overset{\mathsf{NH_2}}}{\overset{\mathsf{N}}}}}}}}}}}}}}}}}}}}$$

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Claim 54 (canceled):

. Claim 55 (currently amended):

The composition of claim 36 comprising wherein the

modified said peptide has the formula:

((SEQ ID NO:1)-Lys- $(\epsilon$ -MPA)).

Claims 56-58 (canceled)